

Research Article

Development of Spray Schedules for Management of Late Blight of Potato Using New Chemicals

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Abstract

Late blight of potato caused by *Phytophthora infestans* (Mont.) de Bary, causes huge yield loss across the world including India. The field efficacy of six new chemicals viz, ametoctradin 27% + dimethomorph 20.27% SC, mandipropamid 23.4% SC, metalaxyl- M 3.3% +chlorothalonil 33% SC, azoxystrobin 11% + tebuconazole 18.3% WS, captan70% +hexaconazole 5% WP and dimethmorph 50% WP + mancozeb 75% WP were evaluated to develop spray schedules for management of late blight during 2015-18. In each treatment, one prophylactic spray of mancozeb 75% WP was incorporated. The results revealed that treatment mancozeb 75% WP @ 0.2% (before appearance) followed by two more spray with Azoxystrobin 11% + tebuconazole 18.3% WS @ 0.1% at 7-10 days intervals showed less average terminal disease severity (32.10%) with highest disease controlled (64.90%) along with highest tuber yield (38.93 t/ha), which were statistically at par with treatment mancozeb 75% WP @ 0.2% (before appearance) followed by two more spray with Mancozeb 75% WP @ 0.2% + dimethomorph 50 % WP @ 0.1% at 7-10 days intervals, with average terminal disease severity 33.11% along with disease controlled 63.78 per cent as against control (92.56%). These treatments schedule having higher B: C ratio and found effective for management of late blight of potato, hence it can be incorporated at farmer practices.

Key words: Fungicides, late blight, management, *Phytophthora infestans*, potato

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